

CITY OF KIRKLAND

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**DEPARTMENT OF PUBLIC WORKS
PRE-APPROVED PLANS POLICY**

Policy R-34B: ON-STREET PARKING IMPACT STUDY

General - The City of Kirkland requires adequate parking to be provided on-site for all land uses. The Kirkland Zoning Code specifies parking requirements for many uses. The Planning Department can help an applicant determine their use(s) and parking requirements. For a modification to a decrease in the required number of spaces may be granted if the number of spaces proposed is documented by an adequate and thorough parking demand and on-street parking impact studies to be sufficient to fully serve the use. The study shall be prepared by a licensed transportation engineer or other qualified professional and shall analyze the operational characteristics of the proposed use which justify a parking reduction. The scope of the study shall be proposed by the applicant's transportation engineer and approved by the City Transportation Engineer. It is recommended that the applicant's engineer contact the City Transportation Engineer to determine the scope of the parking study.

I. Define Study Area

- A. Maximum of 800 feet (2-1/2 blocks) walking distance
- B. Minimum of 200 feet from the project site (one block distance)
- C. Consider the constraints of major arterials and geographic boundaries

II. Map Legal Parking Supply by Block Face

- A. Use techniques shown in Sample Data Sheet for measuring legal parking supply.

III. Define Study Time (exclude holiday week)

- A. The parking study should occur between 6AM and 6PM or as defined by the City Transportation Engineer. The scope and study period must be approved by the City Transportation Engineer. Typical study scope:
 - a. 3 consecutive days minimum, 5 days preferred (same week, non-holiday week)
Tues, Wed & Thurs or Mon to Friday
 - b. Typical times: 6AM, 7AM, 8AM, 9AM, 11AM, 1PM, 4PM, 5PM & 6PM or as required by the City Transportation Engineer (one sweep each hour)
 - c. For special use with weekend impact, collect parking data for 3 consecutive weekends (Saturday and Sunday)

IV. Document Existing Conditions

- A. Record the number of parked vehicles by block face and time
- B. Calculate the parking utilization by block face for existing conditions

$$\frac{(\# \text{ of vehicles parked})}{(\# \text{ of legal parking supply})} \times 100 = \% \text{ Parking Utilization}$$

V. Document Cumulative Project Impact

- A. Estimate the average and peak parking demand of project, using acceptable source (source must be approved by the City Transportation Engineer). The demand should include parking needs of tenants/employees and guests. Empirical parking data should be provided instead of theoretical estimation.
- B. Estimate overflow parking for the proposed project (estimated parking demand minus the parking supply).
- C. Identify any other proposed developments in the vicinity that would impact the on-street parking supply (the City Transportation Engineer will provide the information).
- D. Calculate the future average and peak parking utilization rates for the study area.

VI. Report Preparation

- A. Document all assumptions.
- B. Provide all backup data including count sheets, maps and any relevant data.
- C. Identify the block faces for the on-street parking data on a map showing the number of parking available.
- D. Provide the parking supply and utilization for each block face.

F. Proposed mitigation if applicable.

VIII. Sample Data Sheet.

On-Street Parking Utilization Study SAMPLE DATA SHEET

Date Nov. 12, 2008
 Street 10th Avenue
 Segment Houghton Street to Juanita Lane
 Side West

sample measurements

0 feet 2 start of measurement (back of sidewalk); if no sidewalk, 10 feet behind the edge of pavement.

S 3 stop sign
 Clearance Area # of space

Measure Direction

1. direction of traffic is always toward the top of page
2. edge of sidewalk (SW) starts the measurements
3. Identify presence of stop sign or yield sign with (S)
4. Measure between of curb radius tangent if no sidewalk
5. Identify edge of driveway and using (DW)
6. Measurement to and identify fire hydrant
7. Identification of special zone: loading zone (LZ), no parking zone (NP), time limit zone (TL), parking meter (PM)
8. Measurement of edges of special zone
9. Note any irregularities

Distance Measured From

20 feet edge of sidewalk (SW), no sign (NS) (beginning of block on direction of traffic)
 30 feet stop sign or yield sign
 20 feet Crosswalk
 20 feet driveway entrance to any fire station on both side of street unless posted
 30 feet of the nearest rail of a railroad crossing or as posted
 5 feet each side of driveway
 15 feet fire hydrant, Hyd
 0 feet special zone (loading, no parking...)
 0 feet edge of sidewalk (SW) at end of block

Distance # of spaces

16-31 feet 1
 32-53 feet 2
 54-69 feet 3
 70-91 feet 4
 92-108 feet 5
 108-129 feet 6
 130-145 feet 7
 146-167 feet 8
 168-183 feet 9
 184-205 feet 10
 206-221 feet 11
 222-243 feet 12
 244-259 feet 13
 260-281 feet 14
 282-297 feet 15
 298-319 feet 16
 320-335 feet 17
 336-357 feet 18
 358-373 feet 19
 374-395 feet 20

A calculate length between 2 and 4
 B calculate length between 6 and 7
 C calculate length between 7 and 8
 D calculate length between 10 and 11
 - feet

Direction of traffic

70 feet 4

Driveway 5

80 feet 6

B

driveway clearance 70 feet
 sign clearance -30 feet
 driveway clearance -10 feet
 Clearance 30 feet

1

168 feet 7

Hydrant 7

C

driveway clearance 168 feet
 hydrant clearance -15 feet
 Clearance 68 feet

3

200 feet 8

8

hydrant clearance 200 feet
 Clearance 15 feet

0

Loading Zone, LZ 9

No Parking

0

250 feet 10

10

Loading Zone

288 feet
 -250 feet
 38 feet

2

D

288 feet SW 11

Total 6 spaces